

28, 32-36, 40, 44-48, 52, 56, 72, 74, 76 and 78 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

It is noted that dependent claim 61 is multiply dependent on independent claims 43-50 (61/43-50). The Examiner has both withdrawn claim 61 (Office Action Summary and page 2, Paper No. 20060706) and rejected claim 61 on the merits (pages 3 and 7-9, *Id.*). Therefore, it is presumed that claim 61 as it depends from withdrawn independent claims 43, 49 and 50 (61/43, 49, 50) is withdrawn and that claim 61 as it depends from elected independent claims 44-48 (61/44-48) is rejected as noted in the Official Action. Similarly, it is presumed that multiply dependent claims 62, 63, 66-71 and 80-84 are withdrawn and elected as they depend from their withdrawn and elected independent claims, respectively.

Paragraph 6 of the Official Action rejects claims 28, 32, 36, 48, 52, 61, 62, 66-72, 76, 78, 80, 83 and 84 as obvious based on the combination of U.S. Patent No. 5,032,883 to Wakai and U.S. Patent No. 5,427,961 to Takenouchi. Paragraph 7 of the Official Action rejects claims 40, 56, 63, 66-71, 74 and 80-82 as obvious based on the combination of Wakai, U.S. Patent No. 5,456,763 to Kaschmitter and Takenouchi. Paragraph 8 of the Official Action rejects claims 44, 48, 52, 61, 62, 66-69, 76, 78, 80, 83 and 84 as obvious based on the combination of JP 63-279228 to Nishiki and Takenouchi. The Applicant respectfully traverses the rejection because the Official Action has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the

teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Independent claims 28, 32, 36, 40, 44, 48, 52, 56, 72, 74, 76 and 78 recite that a semiconductor device is flexible. Independent claims 32-36, 40, 47, 48, 52 and 56 recite a thin film transistor formed over a flexible substrate with a resinous layer interposed therebetween. Independent claims 44-48, 52 and 56 recite a pair of flexible or filmy substrates. Wakai, Kaschmitter, Takenouchi and Nishiki, either alone or in combination, do not teach or suggest that a semiconductor device is flexible.

Please incorporate the detailed arguments presented at pages 32-34 of the *Amendment* filed April 26, 2006, regarding the deficiencies in the alleged combination of Wakai, Nishiki, Takenouchi and Kaschmitter.

In the "Response to Arguments" section, the Official Action asserts "that the combination of the applied references would provide a device being flexible because Takenouchi et al. suggested that the device used a substrate having flexibility (col. 1, lines 5-10)" (page 9, Paper No. 20060706). The Applicant again respectfully disagrees and traverses the assertions in the Official Action.

Column 1, lines 5-10, of Takenouchi merely states the following, "The present invention relates to a semiconductor device using a substrate having flexibility, more specifically, it relates to a semiconductor device using an organic resin substrate." The Official Action has not presented a *prima facie* case as to how or why Takenouchi necessarily teaches that the entire semiconductor device may be flexible.

The Applicant respectfully submits that Wakai, Kaschmitter, Takenouchi and Nishiki, either alone or in combination, do not teach or suggest that a semiconductor device is flexible.

Since Wakai, Kaschmitter, Takenouchi and Nishiki do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained.

Furthermore, there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Wakai, Nishiki, Takenouchi and Kaschmitter or to combine reference teachings to achieve the claimed invention. MPEP § 2142 states that the examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. It is respectfully submitted that the Official Action has failed to carry this burden. While the Official Action relies on various teachings of the cited prior art to disclose aspects of the claimed invention and asserts that these aspects could be used together, it is submitted that the Official Action does not adequately set forth why one of skill in the art would combine the references to achieve the features of the present invention.

The test for obviousness is not whether the references "could have been" combined or modified as asserted in the Official Action, but rather whether the references should have been. As noted in MPEP § 2143.01, "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (emphasis in original). Thus, it is respectfully submitted that the standard set forth in the Official Action is improper to support a finding of *prima facie* obviousness.

Please incorporate the detailed arguments presented at pages 34-37 of the *Amendment* filed April 26, 2006, regarding the lack of motivation to combine Wakai, Nishiki, Takenouchi and Kaschmitter.

The "Response to Arguments" section does not address these arguments. Rather, the "Response to Arguments" section appears to repeat the earlier statement of

motivation. Specifically, the Official Action asserts that "Takenouchi et al. suggest that employing the flexible substrate instead of glass would reduce the cost and to obtain a device easily handled having a larger field of application" (page 9, Paper No. 20060706).

However, the alleged statement of motivation appears to relate only to a flexible substrate and does not explain how or why Takenouchi necessarily teaches that the entire semiconductor device may be flexible or how or why Takenouchi would necessarily lead one of ordinary skill in the art at the time of the present invention to modify Wakai, Nishiki and Kaschmitter so as to have a flexible device, as opposed to just a flexible substrate.

Therefore, the Applicant respectfully submits that the Official Action has not provided a proper or sufficient suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify Wakai, Nishiki, Takenouchi and Kaschmitter or to combine reference teachings to achieve the claimed invention.

In the present application, it is respectfully submitted that the prior art of record, either alone or in combination, does not expressly or impliedly suggest the claimed invention and the Official Action has not presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Paragraph 9 of the Official Action rejects claims 28, 32, 36, 44, 48, 52, 61, 62 and 72 under the doctrine of obviousness-type double patenting over the combination of claims 1-3, 6-9, 12, 13, 15, 16, 18, 19, 21-26 and 29-43 of U.S. Patent No. 6,242,758 to Yamazaki and U.S. Patent No. 5,066,110 to Mizushima. Paragraph 12 of the Official Action provisionally rejects claims 28, 32, 36, 44, 48, 52, 61, 62, 66-72, 76, 78 and 80


under the doctrine of obviousness-type double patenting over claims 44, 48, 52, 56 and 59-67 of copending application Serial No. 10/815,653.

As is discussed in greater detail above, independent claims 28, 32, 36, 40, 44, 48, 52, 56, 72, 74, 76 and 78 recite that a semiconductor device is flexible. The Applicants respectfully traverse this ground for rejection and reconsideration of the pending claims is respectfully requested. In any event, the Applicants respectfully request that the double patenting rejections be held in abeyance until an indication of allowable subject matter is made in the present application. At such time, the Applicants will respond to any remaining double patenting rejections.

The Applicant notes that independent claims 33-35 and 45-47 have not been formally rejected in the Official Action. For at least the reasons set forth above, it is respectfully submitted that claims 33-35 and 45-47 are allowable.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789